Headquarters Enterprise Messaging Initiative (HEMI)

Information Technology Exchange

February 28, 2005

The NASA / SAIC ISEM / SAIC UNITeS / LMIT ODIN Team

What is HEMI?

- ➢ Centralized, Integrated E-mail, Address Book and Calendar with support for 4000 users

- ➢ Secure Instant Messaging to other HEMI users*

  > * Solution currently for PC users only. Mac solution is being tested by Microsoft.

- ➢ Secure File Sharing & Collaboration

- ➢ Secure Remote Access from anywhere

- ➢ PDA support (BlackBerry/Treo*/PocketPC*/Palm)

  > * Treo & PocketPC currently in pilot mode at HQ.

HEMI Project Overview

➢ In a report released in June, 2004, the President's Commission on Implementation of U.S. Space Exploration Policy challenged NASA "to transform itself into a leaner, more focused agency."

➢ Administrator O'Keefe stated that the transformation will involve "exploring new ways to move forward and implement change." Additionally, he highlighted the need to "[develop] the tools and processes we need to successfully advance the Vision for Space Exploration. Doing so will enable us to take the next bold steps into space and rekindle the innovation and entrepreneurial skills that is our legacy to humankind."

➢ The HEMI project is one of many new tools requested by the Administrator as the Agency undergoes its transformation.

HEMI Desktop Migration

HEMI Migration Goals

➢ Goal is to migrate 95% of ODIN-supported HQ users migrated to HEMI by March 31, 2005 (2030 seats)

➢ While ISEM will continue to provide overall Systems Integration and Project Management, ODIN will be performing the desktop migration. Customer Satisfaction will be ensured through:

- Clear and open communication between all organizations engaged in the effort
- Performing timely and effective Outreach and follow-up
- Minimizing disruption to users' work schedule
- Ensuring comprehensive and effective user training and documentation
- Performing error-free migration of users into the HEMI environment
- Ensuring timely and effective pre- and post-migration support throughout the migration process

Schedule Overview

| 1/31 | 2/7 | 2/14 | 2/21 | 2/28 | 3/7 | 3/14 | 3/21 | 3/28 | 4/4 -- 5/31 |

User Orientation and Training

User e-Mail "clean-up"

April

Migration Planning and Scheduling

3/31

Meeting Maker Cut-over

e-Mail & Address Book Migration

Migration Quality Assurance

Help Desk, ICPM, COA Support

Estimated User Impact for Migration

- ➢ 95% of all ODIN-supported users to be migrated by March 28 – compressed timeframe

- ➢ Proximity conversions and flexibility on specific user timeframe will help speed the process

- ➢ Expect an average of two hours conversion time per user - highly variable user to user

- ➢ Some users with large/complex mail folders may take longer than 2 hours – average is 1 to 1 ½ hours

- ➢ Blackberry Users need to have device present during conversion to get it redirected

Training

➢ **Lunch & Learn sessions and classroom training is available through the Computer Training Center.**

- For more information on CTC training opportunities contact the CTC at: 358-1111 or email your inquiries to ctc@hq.nasa.gov

➢ **HEMI Website has extensive training materials.** (http://www.hq.nasa.gov/hemi)

➢ **Users who encounter any problems or issues should call the Help Desk.**

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How users can help the migration

➢ Users can help the HEMI migration team in the following manner:

- Ensure that your laptop and BlackBerry are left at your desk for use during the migrations.

- BlackBerry users will need to leave their cradle.

- Notify your COA/ICPM of any "blackout" dates for scheduling your migration.

- Notify your COA/ICPM of any "preferred" date and time for scheduling your migration.
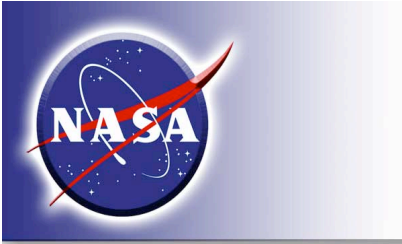
HEMI Technical Overview

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HEMI Features & Benefits

➢ Agency wide capability

- Significant experience throughout the Agency

- Exchange infrastructure in production
  - ❖ Leverages existing investments
  - ❖ Large number of lessons learned that have been applied!

- Production tools enabling Agency wide calendaring

- HEMI provides the first agency-wide Global Address List (GAL) and cross center calendaring capabilities
  - ❖ Currently the NDC Active Directory has over 70,000 objects including a user or a contact for every NASA Civil Servant and contractor in the X.500 directory

- The NDC SharePoint services, https://portal.nasa.gov, allows project teams to store all project-related data in a single location and is accessible from anywhere

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HEMI Features & Benefits

➢ **In-Place Infrastructure**

- Strong WAN connectivity
- Fast, highly scalable SAN infrastructure
- Mature Data Center Facilities

➢ **In-Place Labor**

- Experienced Microsoft Engineers In-house
- Extensive Microsoft Clustering and Wireless PDA experience
- Operational SAN experience
- ODIN augmentation

HEMI Features & Benefits

➢ In-Place Operations

- Integrated 24 x 7 Help desk, System admin and Agency-wide Intrusion Detection

- Enterprise Tivoli implementation

➢ Improved Disaster Recovery

- Redundancy and failover for E-mail, Calendar and BlackBerry services for HQ

- HEMI E-mail and calendaring is available from any Internet connection using HTTPS (no special software or VPN required)

HEMI Features & Benefits

➢ Full support for BlackBerrys using the BlackBerry Enterprise Server version 4.0

- Wireless E-mail synchronization
- Wireless Calendar synchronization
- Wireless Directory lookup (GAL)
- Sent mail synchronization
- Encrypted PIN to PIN
- Remote kill of BlackBerry devices

➢ Strong support from the vendor community

- Many vendors provide add-on services (e.g. anti-virus, anti-SPAM, encryption modules)
- Widely available API allows vendors a relatively easy integration path

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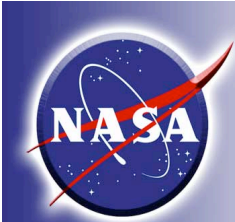
High-Level HEMI Architecture

- ➢ Centralized Services provided by the NASA Data Center (NDC)
  - Application Service Provider model
  - 2 NDC locations providing services
- ➢ Center based account management
- ➢ Microsoft based solution
  - Exchange 2003
  - SharePoint 2003
  - Live Communication Server 2003
  - Active Directory
  - BlackBerry Enterprise Server
 - GoodLink Server

High-Level HEMI Systems Location

Hosted at NDC@JSC:

• Primary Exchange (E-mail/ Calendaring) and BlackBerry servers for HQ

• NDC and HQ Domain Controllers

• Backup GoodLink services

Hosted at NDC@MSFC:

• Backup Exchange (E-mail) and BlackBerry services

• Primary SharePoint services (document sharing)

• Primary Live Communications Server (LCS) services (IM)

• JSC and HQ Domain Controllers

• Primary GoodLink services (Palm/PocketPC services)
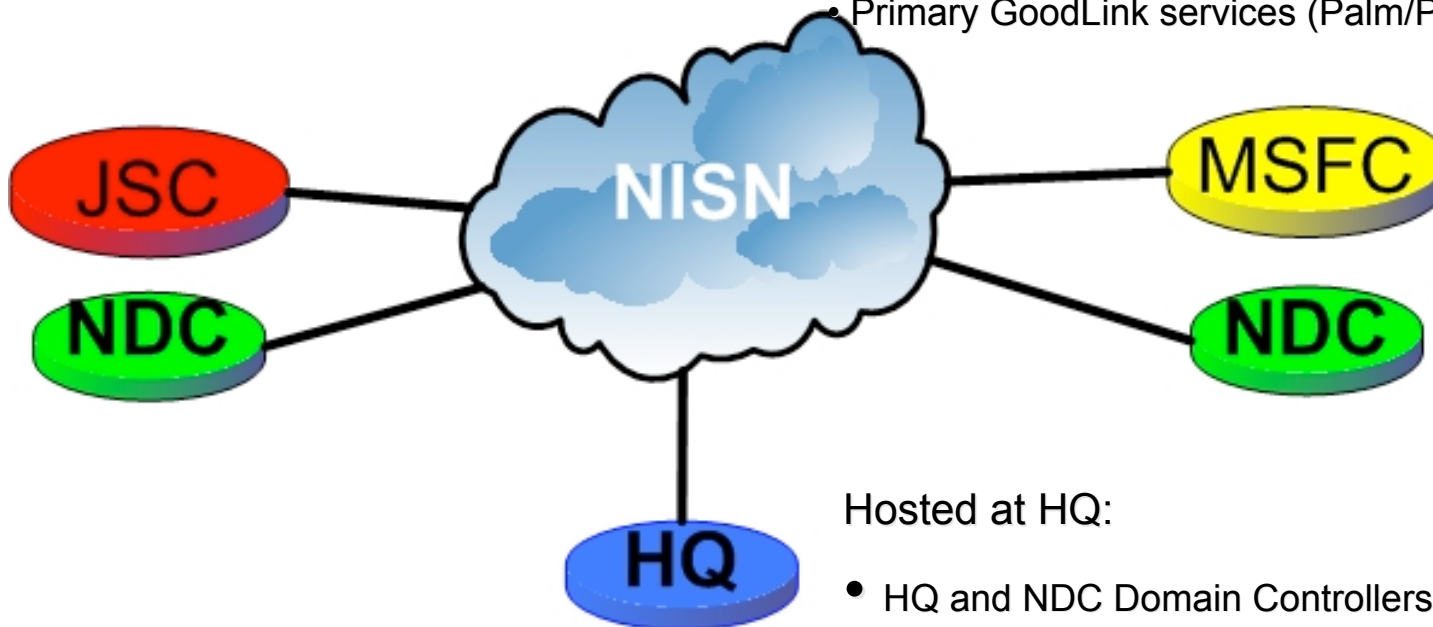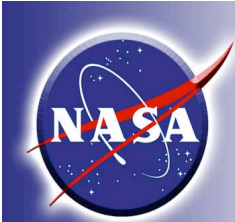

Hosted at HQ:

• HQ and NDC Domain Controllers

Expected Service Availability

➢ NISN WAN   99.5%

➢ Active Directory   99.99%

➢ Exchange   99.99%

➢ SharePoint   99.9%

➢ Live Communication Server 99.5%

Exchange Server 2003 Overview

➢ Supported E-mail clients include:

  ❖ Microsoft Outlook 2003 for the PC

  ❖ Microsoft Entourage 2004 for the Macintosh

  ❖ Outlook Web Access

  ❖ Any IMAP/S and SMTPS/AUTH client for E-mail only

➢ The Exchange Architecture is scaled to support the following at NDC@JSC for HEMI:

  ❖ 100 1GB mailboxes

  ❖ 300 500MB mailboxes

  ❖ 3600 100MB mailboxes

➢ Complete Anti-Virus and Anti-Spam capability

  ❖ Users have the ability to control their anti-SPAM quarantine

SharePoint Portal Server 2003

➢ The SharePoint Server Farm can be found at: https://portal.nasa.gov

➢ All SharePoint data resides at NDC in a central database and team websites will be created by the NDC upon request

➢ The maximum single file upload limit is at 75 megabytes (MB)

➢ Team sites and Office integration capabilities:

- Office 2003 delivers full integration
- Office 2004 for Mac does not provide full integration due to lack of ActiveX support

Live Communications Server 2003

➢ Available from anywhere to HEMI-only user base

➢ Provides presence awareness among participants and integration with SharePoint Portal Server 2003, Outlook 2003 and Exchange Server 2003

➢ Text chat functionality is the only service of the Messenger client NASA HQ is currently supporting

➢ Instant Message communications will not be archived

➢ Windows clients only until web based client is released by Microsoft (code name Budapest)

➢ Some firewalls are not compatible

➢ Communication is encrypted

Remote Access Features

- ➢ An HQ Laptop will have full access from anywhere
- ➢ Web Access
  - • Outlook Web Access (OWA) provides remote E-mail/Calendaring/Directory/Task/Notes access and is accessible anywhere without the need to dial-up to HQ or log onto SNA.
    - ❖ OWA can be accessed by typing in the URL https://webmail.nasa.gov and click on HQ
    - ❖ All client communications are secured via SSL
    - ❖ OWA provides most functions compared to Outlook and Entourage
      - ▪ Look and feel is similar to Outlook 2003
      - ▪ No access to local data stored on hard drive
  - • SharePoint access available anywhere via any browser
  - • No LCS web access at this time
- ➢ Alternate Mail client using SMTP/S and IMAP/S
- ➢ Take home kit will be available for Mac and PC
  - • Full version of Office (+ Messenger for PC)

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MeetingMaker Data Migration

➢ MeetingMaker data will be imported into Exchange after all HQ users have been migrated to HEMI.

➢ MeetingMaker is required to schedule resources or non-HEMI users at HQ until the cutover.

➢ Only meetings in Exchange will appear on BlackBerry devices.

- Intellisync is offered as point-in-time method for importing meetings into Outlook (PC only solution).

➢ Calendaring groups will use the same "distribution lists" as E-mail lists.

- Resources (locations) will be added with center specific prefix.
  ❖ HEMI distribution list will be DL-HQ-HEMI
  ❖ Conference room 4E40 will be CR-HQ-4E40

Major Differences For HEMI

➢ E-mail:

- Outlook/Entourage client will be required for full feature set.

- HEMI and non-HEMI users will be able to send and receive mail.

- Users will not be able to send/receive .zip files or executable files via E-mail.

➢ Entrust

- PC users will be able to send/receive Entrust encrypted e-mail from Outlook via Entrust 7.0 plugin.

- Mac users will be setup to use Entrust 6.21 for NASA PKI integration.

Major Differences For HEMI (Cont'd)

- ➢ Lists:
  - Same process used currently to request lists.
  - Only post-transformation organization data will be populated in HEMI GAL.
  - Customer direction required to generate server-based lists.

- ➢ BlackBerrys
  - All BlackBerrys for HEMI users will be moved to the NDC@JSC BES.

Known Issues With User Impact

➤ No Instant Messaging client for Macintosh exists. Microsoft is working on web version (code name Budapest) which will provide support to Mac users.

➤ Entourage does not support some advanced features such as delegation, voting, and server-side rules.

➤ Entourage does not have tasks or notes stored on the server.

➤ Extraordinarily large mail stores will not be imported into Exchange during the initial migration process. Instructions for subsequently importing non-migrated mail will be developed for use by the end-user and/or support personnel (ODIN Technicians, ICPMs, COAs).
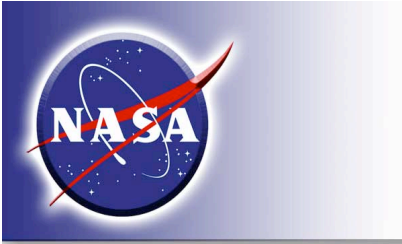
New Features/Demo's

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Any Questions?

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Thank you for your participation!!!

For more information, visit the HEMI
website at
http://www.hq.nasa.gov/hemi